

WHAT IS CLAIMED IS:

1 1. A hard disk drive comprising:
2 recognizing means used for recognizing that an optimization/inspection process to
3 be performed on the hard disk device has not yet been completed; ✓
4 growth-program receiving means, based on the recognition of the recognizing
5 means, for receiving from a parent hard disk drive connected to the hard disk drive a growth
6 program necessary for performing the optimization/inspection process on the hard disk drive
7 itself; and
8 execution means, based on the growth program received by the growth-program
9 receiving means, for executing the optimization/inspection process on the hard disk drive itself.

1 2. A hard disk drive according to claim 1, further comprising command
2 transmitting means, based on the recognition of the recognizing means, for transmitting a
3 command requesting the growth program to the parent hard disk drive.

1 3. A hard disk drive according to claim 1, further comprising storing means
2 for storing in a memory the growth program executed by the execution means;
3 wherein, if the hard disk drive is thereafter connected to another hard disk drive in
4 which the optimization/inspection process has not yet been completed, the growth program
5 stored in the storing means is supplied to the another hard disk drive.

1 4. A hard disk drive according to claim 1, wherein:
2 the parent hard disk drive takes charge of a predetermined part of the
3 optimization/inspection process to be executed by the execution means.

1 5. A hard disk drive comprising:
2 a ROM for storing a basic program that receives a growth program for performing
3 self-optimization; and ✓
4 a MPU for receiving the growth program according to the basic program stored in
5 the ROM, and performing the self-optimization by the received growth program.

1 6. A hard disk drive according to claim 5, wherein:

2 the basic program stored in the ROM includes a function of recognizing that the
3 hard disk drive is in a state in which the self-optimization has not yet been performed; and
4 the MPU recognizes its own state according to the basic program.

1 7. A hard disk drive according to claim 5, wherein:
2 the basic program stored in the ROM includes a function of transmitting a
3 command requesting the growth program to a parent hard disk drive to be connected.

1 8. A hard disk drive according to claim 5, wherein:
2 after the optimization ends, the MPU stores the growth program in a
3 predetermined memory.

1 9. A hard disk drive comprising:
2 connection means adapted to be connected to an unfinished hard disk drive where
3 servo information is not written to a disk;
4 storing means for storing a program by which the unfinished hard disk drive
5 writes servo information to the disk; and
6 supplying means for supplying the unfinished hard disk drive with the program
7 stored in the storing means.

1 10. A hard disk drive according to claim 9, further comprising:
2 receiving means for receiving a request command for the program from the
3 unfinished hard disk drive;
4 wherein the supplying means supplies the program on the basis of the request
5 command received by the receiving means.

1 11. A hard disk drive according to claim 9, wherein:
2 said program includes a function of executing optimization/inspection processing,
3 and the hard disk drive further includes execution means for executing part of the
4 optimization/inspection processing on the unfinished hard disk drive.

1 12. A hard-disk-drive optimization method, using a first hard disk drive where
2 optimization processing has already been completed, for executing the optimization processing

3 on a second hard disk drive where the optimization processing has not yet been completed, said
4 method comprising the steps of:

5 supplying information used for optimization, which is included in the first hard
6 disk drive, from the first hard disk drive to the second hard disk drive; and

7 allowing, according to the supplied information used for optimization, the second
8 hard disk drive to execute various kinds of processes so as to mature into an optimized hard disk
9 drive.

1 13. A hard-disk-drive optimization method according to claim 12, further
2 comprising the steps of:

3 recognizing by the second hard disk drive itself that the optimization processing
4 to be performed on the second hard disk drive has not yet been completed; and

5 issuing, according to the recognition, a command requesting the information used
6 for optimization to the first hard disk drive.

1 14. A hard-disk-drive optimization method according to claim 12, further
2 comprising the steps of:

3 recognizing by the second hard disk drive itself that the optimization processing
4 to be performed on the second hard disk drive has not yet been completed; and

5 issuing, according to the recognition, a command requesting the information used
6 for optimization to the first hard disk drive.

7
1 15. A hard-disk-drive optimization method according to claim 12, further
2 comprising the step of:

3 after the second hard disk drive has completed the optimization processing,
4 supplying the information used for optimization from the second hard disk drive to a third hard
5 disk drive in which the optimization processing has not yet been completed.

6
1 16. A hard-disk-drive optimization method according to claim 12, wherein:
2 the information used for optimization, which is supplied from the first hard disk
3 drive, includes a growth program by which the second hard disk drive executes various kinds of
4 optimization processes.

1 17. A hard-disk-drive optimization method according to claim 15, wherein:
2 the information used for optimization, which is supplied from the first hard disk
3 drive, includes a test code possessed by the first hard disk drive.

1 18. A hard-disk-drive optimization method according to Claim 12, wherein:
2 the first hard disk drive executes part of the optimization processing to be
3 executed by the second hard disk drive.

1 19. A hard-disk-drive manufacturing method for manufacturing a second hard
2 disk drive by use of a first hard disk drive which has already been manufactured, said method
3 comprising the steps of:
4 making a connection between the first hard disk drive and the second hard disk
5 drive;
6 supplying information, by which the second hard disk drive writes servo
7 information to a disk of the second hard disk itself, from the first hard disk drive to the second
8 hard disk drive; and
9 according to the supplied information, writing the servo information to the disk by
10 the second hard disk drive itself;

1 20. A hard-disk-drive manufacturing method according to claim 18, further
2 comprising the steps of:
3 supplying information, by which the second hard disk drive performs inspection
4 on the second hard disk itself, from the first hard disk drive to the second hard disk drive; and
5 according to the supplied information, performing the inspection on the second
6 hard disk drive by itself.

1 21. A program allowing a computer built into a hard disk drive to implement
2 the functions of:
3 recognizing that an optimization/inspection process to be performed on the hard
4 disk drive has not yet been completed;

5 requesting, based on the recognition, another hard disk drive to supply a growth
6 program that is required to perform the optimization/inspection process by the hard disk drive
7 itself; and
8 receiving, based on the request, the growth program supplied from said another
9 hard disk drive.

1 22. A program according to claim 20, wherein:
2 the recognizing function recognizes that the optimization/inspection process to be
3 performed on the hard disk device has not yet been completed, by checking whether or not
4 information specific to the hard disk drive is stored, or by checking whether or not servo
5 information is written to a disk of the hard disk device.

1 23. A program allowing a computer built into a hard disk drive to implement
2 the functions of:
3 receiving, from another hard disk drive in which a optimization/inspection
4 process has not yet been completed, a request for a growth program by which the another hard
5 disk drive executes the optimization/inspection process by itself; ✓
6 reading out the growth program stored in a memory; and
7 supplying the another hard disk drive with the read growth program.

1 24. A program according to claim 22, further implementing the function of:
2 executing a part of the optimization/inspection process of the another hard disk
3 drive.

1 25. A program allowing a computer built into a hard disk drive to implement
2 the functions of:
3 writing servo information to a disk of the hard disk drive by use of information
4 exported from another hard disk drive; and
5 executing an inspection process on the hard disk drive by use of the information
6 exported from the another hard disk drive.